

LOCUS HSU13395 1475 bp mRNA linear PRI 15-SEP-1994  
 DEFINITION Human oxidoreductase (HHCMA56) mRNA, complete cds.  
 ACCESSION U13395  
 VERSION U13395.1 GI:538131  
 KEYWORDS .  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCE 1 (bases 1 to 1475)  
 AUTHORS Gmerek, R.E. and Medford, J.I.  
 TITLE The complete sequence of a human hippocampus gene (HHCMA56) shows  
 homology to developmental genes from Arabidopsis and Brassica napus  
 JOURNAL Unpublished  
 REFERENCE 2 (bases 1 to 1475)  
 AUTHORS Gmerek, R.E.  
 TITLE Direct Submission  
 JOURNAL Submitted (11-AUG-1994) Ronald E. Gmerek, Biology, Eberly College  
 of Science, The Pennsylvania State University, 506 Wartik  
 Laboratory, University Park, PA 16802, USA

FEATURES Location/Qualifiers  
 source 1..1475  
 /organism="Homo sapiens"  
 /mol\_type="mRNA"  
 /isolate="two year old female"  
 /db\_xref="taxon:9606"  
 /chromosome="16"  
 /sex="female"  
 /tissue\_type="hippocampus"  
 /clone\_lib="hippocampus library, Stratagene catalog number  
 936205"  
 /dev\_stage="juvenile"  
 /note="DSEG number: D16S432E"  
 gene 1..1475  
 /gene="HHCMA56"  
 CDS 19..1131  
 /gene="HHCMA56"  
 /codon\_start=1  
 /product="oxidoreductase"  
 /protein\_id="AAA21465.1"  
 /db\_xref="GI:538132"  
 /translation="MARASEAVSRILEEWHKAKVEAMTLDLALLRSVQHFAEAFKAKN  
 VPLHVLVCNAATFALPWSLTGDLTTTFQVNHGLGHFYLVQLLPGMFCAAQLLPVSLWS  
 PQSPIDLQILTPWENWTSVASLQKQTTIGRCWLITGPSSATSSSPTSCTVASPTRGH  
 VERSDRSWKYDVLQHSSQLVGVHTAVYLGFAHQVHATGSCHHRVLCPPRTGGSRRD  
 VLQQLPLHALTRSSERRDGPDPVGLSERLIQERLAASPAKWSSERMGTHTRPVCVPS  
 RKCQAGPLPNVPPTQIRKSKGNKSIHNRVKNLKYQEAGNSWGVSLFWGWARHRSCL  
 FLVVACLKVKTWLACRFRISLEKHQQFSSFYCYRIA"

## ORIGIN

```

1  atcttggcct gcaggaacat ggcaagggcg agtgaagcag tgtcacgcat tttagaagaa
61  tggcataaag ccaaggtaga agcaatgacc ctggacctcg ctctgctccg tagcgtgcag
121 cattttgctg aagcattcaa ggccaagaat gtgcctcttc atgtgcttgt gtgcaacgca
181 gcaacttttg ctctaccctg gagtctcacc aaagatggcc tggagaccac ctttcaagtg
241 aatcatctgg ggcacttcta ccttgctccag ctctctccag ggatgttttg tgccgctcag
301 ctctgcccgc tgtcattgtg gtctctcag agtcccatcg atttacagat attaacgact
361 ccttgggaaa actggacttc agtcgcctct ctccaacaaa aaacgactat tgggcgatgc
421 tggcttataa caggtccaag ctctgcaaca tctcttctc caacgagctg caccgtcgcc
481 tctccacgc ggggtcacgt cgaacgcagt gatcgatcct ggaaatatga tgtactccaa
541 cattcatcgc agctggtggg tgtacacact gctgtttacc ttggcgaggc ctttcaccaa
601 gtccatgcaa caggagctg ccaccaccgt gtactgtgct gctgtcccag aactggaggg

```

661 tctaggaggg atgtacttca acaactgctg ccgctgcatg ccctcaccag aagctcagag  
721 cgaagagacg gcccggaccc tgtgggcctc agcgagaggc tgatccaaga acgcttggca  
781 gccagtccgg ctaagtggag ctgagagcgg atgggcacac acacccgccc tgtgtgtgtc  
841 ccctcacgca agtgccaggc tgggcccctt ccaaagtcc ctccaacaca gatccgcaag  
901 agtaaaggaa ataagagcat tcacaacaga gtgaaaaatc ttaagtacca atgggaagca  
961 gggaaattcct ggggtaaagt atcacttttc tggggctggg ctaggcatag gtctctttgc  
1021 tttctggtgg tggcctgttt gaaagtaaaa acctggttgg cgtgtagggt ccgtatctcc  
1081 ctggagaagc accagcaatt ctcttccttt tactgttata gaatagcctg aggtccctc  
1141 gtccatccag ctaccaccac caccaccact gcagccaggg gctggccttc tcctacttag  
1201 ggaagaaaaa gcaagtgttc actgctcctt gctgcattga tccaggagat aattgtttca  
1261 ttcattcctga ccaagactga gccagcttag caactgctgg ggagacaaat ctcagaacct  
1321 tgtcccagcc agtgaggatg acagtgcac ccagaggagg tagaatacgc agaactacca  
1381 ggtggcaaag tacttgtcat agactccttt gctaattgcta taaaaaaat tctttagaga  
1441 ttataacaaa tttttcaaat cattccttag atacc

//